

AQUAPLAN

DISEASE INFORMATION LEAFLET

PERCH RHABDOVIRUS

BACKGROUND

- Rhabdoviruses of the genus *Vesiculovirus* are an emerging group of pathogenic viruses and include perch rhabdovirus, pike-fry rhabdovirus, tench rhabdovirus, lake trout rhabdovirus and spring viraemia of carp virus.
- Rhabdoviruses are among the most economically significant fish pathogens.
- The disease was first reported in Ireland in wild brown trout in 1986.
- Since the early 1990's, vesiculoviruses have been reported in farmed and wild fish species such as perch, brown trout, lake trout, pike, tench and bream.
- As vesiculoviruses appear to be widespread in the wild, the capture of wild fish as broodstock for aquaculture is an important factor in the spread of disease.
- Since 2005, rhabdovirus infections have been identified as causing high mortalities in farmed perch in Ireland.

CLINICAL SIGNS

- Affected fish can exhibit abnormal swimming behaviour and reddening at the base of the fins.
- Internally there may be blood spots on internal organs including the swim bladder and blood tinged fluid in the body cavity.
- Histopathologically, multifocal necrosis can be found in the spleen and kidney and smaller necrotic areas observed in the liver.



DIAGNOSIS

- Diagnosis of rhabdovirus infections are based on clinical signs, histopathological changes and laboratory investigations.
- Confirmation of the diagnosis requires isolation of the virus with serological or molecular identification of the causative agent.
- The vesiculoviruses are highly similar and are best distinguished using molecular methods such as genome sequencing.

CONTROL

- There are currently no vaccines or authorised medical treatments available for perch rhabdovirus infections.
- Careful disinfection of egg strings helps prevent apparent vertical transmission of the virus from perch broodstock.
- Screening of fish to be used as broodstock should form part of any disease prevention programme.
- Strict biosecurity measures should be implemented to reduce the possibility of horizontal transmission of the virus.

WHAT SHOULD I DO?

- Minimise potentially stressful procedures such as handling and grading when a rhabdovirus infection is suspected or confirmed.
- As perch rhabdovirus is not listed under Council Directive 2006/88/EC, control of the disease is a matter for the operator and the retained veterinary practitioner.
- Strict biosecurity measures should be implemented around the infected site.
- Remove moribund and dead fish from infected tanks daily. Mortalities should be disposed of in accordance with current Animal By-Products Regulations.
- If the vet notices a change in the nature of the infection and suspects a more virulent disease is emerging or alternatively, if the disease is suspected in a new host species, you should contact the Fish Health Unit of the Marine Institute. If you suspect the presence of a listed disease you should also notify the Marine Institute.

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